EFFECTS OF PRENATAL EXPOSURE TO AMPHETAMINES OR METHAMPHETAMINES, ALCOHOL OR OTHER DRUGS

Experts now estimate that one-half to three-quarters of a million infants are born each year who have been exposed to one or more illicit drugs in utero. When the legal drugs—alcohol and tobacco—are added, the figure rises to considerably more than one million substance exposed infants.

Although prenatal drug exposure has captured a great deal of public attention, prenatal exposure to alcohol is more widespread and has perhaps an even more serious impact. The National Institute on Drug Abuse estimates that 60 percent of women of childbearing age consume alcoholic beverages despite the fact that alcohol consumption during pregnancy is implicated in a wide range of birth defects and developmental disabilities, including mental retardation, physical abnormalities, and visual and auditory impairments.

Estimates of the Extent of Prenatal Exposure to Alcohol and Other Drugs

Prevalence estimates vary. One study estimates that 11 percent of all newborns, more than 459,690 children born each year, have been exposed to illicit drugs. Another study estimates that more than 739,000 women each year use one or more illegal substances during a pregnancy.

The dramatic increase in the popularity of cocaine (and especially crack) during the late 1980s prompted much of the contemporary concern with prenatal drug exposure. Estimates of the percentage of children born prenatally exposed to cocaine (including crack) each year range from 1 to 4.5 percent. Using these rates, it is estimated that women give birth to between 41,790 and 188,055 children each year who were exposed to cocaine. (Unless otherwise noted, National Center for Health Statistics estimates of live births for 1990 provide the basis for all statistical extrapolations.)

Despite the growing use of cocaine, marijuana remains the most widely used illicit drug. Rates of newborns prenatally exposed to marijuana have been estimated at levels from 3 to almost 20 percent, which would indicate that every year women give birth to between 125,370 and 835,800 children prenatally exposed to marijuana.

Prenatal exposure to alcohol far exceeds that of illicit drugs. One study estimates that women give birth to more than 2.6 million infants exposed to alcohol each year. Fetal Alcohol Syndrome (FAS) annually affects between 1.3 and 2.2 children per 1,000 live births in North America. Researchers estimate that cases of Alcohol-Related Birth Defects (ARBD) exceed those of FAS by a ratio of 2:1 to 3:1. This would indicate that women in the U.S. annually give birth to between 16,548 and 22,064 children exhibiting the effects of prenatal exposure to alcohol.

Other evidence also indicates that the number of children born exposed to alcohol and other drugs is high.

- 4.5 million (7.7 percent) of the women of childbearing age in the U.S. have used an illicit drug in the past month, including 601,000 cocaine users and 3.3 million who have used marijuana. Many more are heavy drinkers.
- Childbearing-age women comprise the majority of women who use drugs.
- Women who use illicit drugs other than marijuana have a premarital pregnancy rate twice that of those who do not.
- The majority of women entering drug treatment programs have children.

Research on a woman's consumption of alcohol and other drugs, once she knows she is pregnant, is inconclusive. Factors such as substance, age, socioeconomic status, and the presence of prenatal care may all affect consumption. Researchers found that, while the overall rate of women who drink during pregnancy declined during the mid-1980s, the rate among less-educated women or those under the age of 25 remained the same.

Effects of Prenatal Exposure to Amphetamines and Methamphetamines

Some of the research on the prenatal effects of amphetamines or methamphetamines demonstrates perinatal results similar to those found in studies of cocaine or heroin. However, most researchers express reservations concerning their inability to control for the effects of variables such as poor prenatal care or foster-care placement.

In one study of eight year olds whose mothers had abused amphetamines during pregnancy, researchers did not find any significant differences from children whose mothers had not used drugs, on measures of physical health (including growth), IQ, and performance on psychometric tests. This research team suggested that the differences found (including increased levels of aggression and problems relating to peers) may result from socioenvironmental factors. Thus, although some of the research indicates that prenatal exposure to amphetamines or methamphetamines may have some short-term consequences for the neonate, most of the research on this group of drugs remains inconclusive.

Use of Alcohol and Other Drugs During Pregnancy

- Alcohol produces by far the most serious neurobehavioral effects in the fetus when compared to other drugs including heroin, cocaine and marijuana. (Institute of Medicine Report to Congress)
- Over three times as many women used alcohol during pregnancy than used illegal drugs. (National Institute on Drug Abuse, 1994)
- In the first nationally representative survey of drug use among pregnant women, 20.4 percent or 820,000 women reported smoking cigarettes; 18.8 percent or 757,000 women reported drinking alcohol; and 5.5 percent, or 221,000 women, used an illicit drug at least once (HHS, National Institute on Drug Abuse {NIDA}, National Pregnancy and Health Survey, NIH Publication No. 96-3819, 1996, p. xxi-xxii).
- At least one of every five pregnant women uses alcohol and/or other drugs. (Substance Abuse and the American Woman, Center on Addiction and Substance Abuse, Columbia University, June 5, 1996)
- Black women had significantly higher rates than white women for use of any illicit drug and cocaine, and significantly higher rates than Hispanic women for use of any illicit drug and marijuana. However, the estimated number of white women using any illicit drug or marijuana was substantially greater than the number in other race/ethnic groups. In comparing differences in illicit drug use among age groups, the rates of crack cocaine use in women ages 25-29 and 30 and older were significantly higher than the rate for those under age 25. Differences by age within race/ethnic groups appeared to vary by drug, but the statistical significance of these differences was not determined. (National Pregnancy and Health Survey, op. cit., p. xxi-xxii).
- Estimates show 40,000 to 75,000 drug-exposed babies (1 to 2 percent of live births) to 375,000 (11 percent) are born each year. These numbers reflect maternal use of illicit drugs only and would be much larger if alcohol and nicotine were included (Cook, op. cit. p. 3).
- Newborns with perinatal alcohol and other drug exposure have hospital stays three times longer than those born to mothers who are drug-free (National Center on Addiction & Substance Use at Columbia University, The Cost of Substance Abuse to America's Health Care System, Report 1: Medicaid Hospital Costs, 1993, p. 40).

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